

ABSTRACT

A method of stabilizing and potentiating action of molecules of known anti-angiogenic substances such as ANGIOSTATIN® or ENDOSTATIN® by using in coupling conjugation with cis-unsaturated fatty acids (c-UFAs) in the treatment of cell proliferative disorders uses c-UFAs chosen from linoleic acid, gamma-linolenic acid, dihomo-gamma-linolenic acid, arachidonic acid, alpha-linolenic acid, eicosapentaenoic acid, docosahexaenoic acid and cis-parinaric acid in predetermined quantities. Preferably, the c-UFAs are in the form of polyunsaturated fatty acids (PUFAs). Uncontrolled or undesirable angiogenic activity promotes cell proliferative disorders and tumor growth, which can be inhibited by the selective use of PUFAs with anti-angiogenic substances used selectively in conjunction with predetermined anti-cancer drugs. For a non-glioma type of cell proliferation disorder, a sodium, potassium or lithium salt of a PUFA is preferred to form an admixture with an anti-angiogenic substance. Anti-angiogenic substances envisaged in this invention include ANGIOSTATIN, ENDOSTATIN, platelet factor-4, TNP-470, thalidomide, interleukin-12 and metalloproteinase inhibitors (MMP). A preferred method of administration of the mixture to treat a tumor is intra-arterial administration into an artery which provides the main blood supply for the tumor.